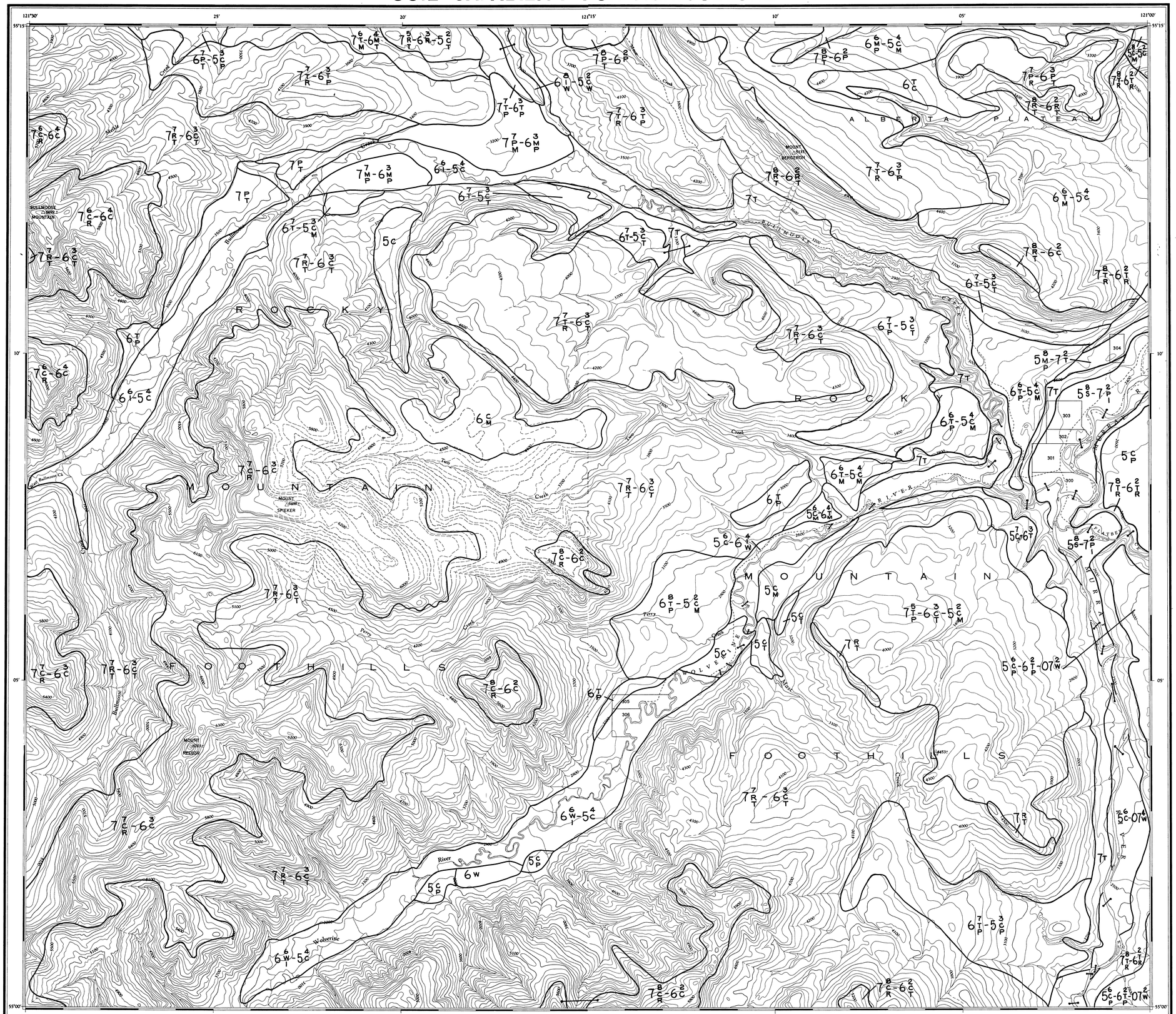
SOIL CAPABILITY FOR AGRICULTURE

NO. 7 93P/3



LEGEND

Explanation of Map Symbols

Capability class → 6T-5C (P) (M) ← Limiting subclasses

Percentage of map unit occupied by each class

Capability Classes

In this classification soils are grouped into seven classes on the basis of 1970 soil survey information. Soils in classes 1,2,3, and 4 are considered capable of sustained use for cultivated field crops, those in classes 5 and 6 only for perennial forage crops and those in class 7 for neither. Unfortunately, due to adverse climate, no class 1-4 soils exist.

Some of the important factors on which the classification is based are:

- The soils will be well managed and cropped, under a largely mechanized system.
- Land requiring improvements, including clearing, that can be made economically by the farmer himself, is classed according to its limitations or hazards in use after the improvements have been made. Land requiring improvements beyond the means of the farmer himself is classed according to its present condition.
- The following are not considered: distances to market, kind of roads, location, size of farms, type of ownership, cultural patterns, skill or resources of individual operators, and hazard of crop damage by storms.

The classes are based on intensity, rather than kind, of their limitations for agriculture. Each class includes many kinds of soil, and many of the soils in any class require unlike management and treatment.

CLASS 1-4 DUE TO ADVERSE CLIMATE, NO CLASS 1-4 SOILS EXIST IN THIS AREA.

CLASS 5 - SOILS IN THIS CLASS HAVE VERY SEVERE LIMITATIONS THAT RESTRICT THEIR CAPABILITY TO PRODUCING PERENNIAL FORAGE CROPS, AND IMPROVEMENT PRACTICES ARE FEASIBLE.

The limitations are so severe that the soils are not capable of use for sustained production of annual field crops. The soils are capable of producing native or tame species of perennial forage plants, and may be improved by use of farm machinery. The improvement practices may include clearing of bush, cultivation, seeding, fertilizing, or water control.

CLASS 6 - SOILS IN THIS CLASS ARE CAPABLE ONLY OF PRODUCING PERENNIAL FORAGE CROPS, AND IMPROVEMENT PRACTICES ARE NOT FEASIBLE.

The soils provide some sustained grazing for farm animals, but the limitations are so severe that improvement by use of farm machinery is impractical. The terrain may be unsuitable for use of farm machinery, or the soils may not respond to improvement, or the grazing season may be very short.

CLASS 7 - SOILS IN THIS CLASS HAVE NO CAPABILITY FOR ARABLE CULTURE OR PERMANENT PASTURE.

This class also includes rockland, other non-soil areas, and bodies of water too small to show on the maps.

CLASS O - Organic soils.

Limiting Subclasses

C - adverse climate. The main limitation is low temperature during the growing season.

I - inundation. Flooding by rivers and streams limits agricultural use.

M - moisture deficiency. A low moisture holding capacity, caused by adverse soil characteristics (not to be confused with climatic drought).

P - stoniness. Stones interfere with tillage, planting, and harvesting.

R - shallowness to bedrock. Bedrock is less than one metre from the surface.

S - soil limitations. A combination of two or more subclasses.

T - adverse topography. Steepness of slope limits agricultural use.

W - excess water. The excess water may be due to poor drainage, a high water table, or seepage from surrounding areas.

Note

This map was prepared in 1970 under the Canada Land Inventory program, before the Northeast Coal Study. Current soils and climate information was not used in the preparation of this map. If desired, this map could be updated using current information.

References

Watt, W. and L. Farstad. 1970. Soil Capability for Agriculture - Gwillim Lake 93 P/SW. Lands Directorate, Environment Canada. Ottawa, Ontario.

Runka, G. G. 1973. Methodology: Land Capability for Agriculture. Resource Analysis Branch, B. C. Ministry of Environment, Kelowna, B. C. 25 p.

Environment Canada. 1965. Soil Capability Classification for Agriculture. Canada Land Inventory Report No. 2. Ottawa, Ontario. 16 p.

Credits

Mapped by - W. Watt and L. Farstad, Agriculture Canada.

Date of Mapping: 1970.

Drafted by - Cartographic Section, Resource Analysis Branch.

Topographic base provided by - Surveys and Mapping Branch, B. C. Ministry of Environment.

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